

PATENT APPLICATION

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re application of

Docket No: Q64393

Nadine ASSAF

Appln. No.: 09/865,733

Group Art Unit: 2613

Confirmation No.: 5965

Examiner: Gims S. PHILIPPE

Filed: May 29, 2001

For: PICTURE SEGMENT CODING WITH MOTION PREDICTION

PRE-APPEAL BRIEF REQUEST FOR REVIEW

MAIL STOP AF - PATENTS

Commissioner for Patents

P.O. Box 1450

Alexandria, VA 22313-1450

Sir:

Pursuant to the new Pre-Appeal Brief Conference Pilot Program, and further to the Examiners' Final Office Action dated December 27, 2005, Applicant files this Pre-Appeal Brief Request for Review. This Request is also accompanied by the filing of a Notice of Appeal.

All claims stand rejected under 35 USC 103, and in each case the primary reference relied on by the examiner is Kim (USP 5,838,829).

The invention is directed to a particular improvement in video coding. In the H.263+ standard, motion prediction is confined to independent segments so that, among other things, errors will not propagate through the picture but will be confined to a segment. In Fig. 1, each segment is made up of two groups of blocks GOB_i, with each segment being separated from an adjacent segment by a synchronization signal Sync. GOB₂ and GOB₃ make up one segment, and GOB₄ and GOB₅ make up another. When predicting motion of the macroblock MB_x along

the upper edge of the segment, the invention permits use of the macroblocks in the group GOB3 belonging to the immediately above segment.

It is to be noted that neither the block nor the segment in the present invention are moving, but rather the image within them is moving. It is this motion of the image which is being predicted.

Kim deals with encoding the contour of an object in a picture. A contour is not a 'segment' of a picture but is rather something that is being displayed in the picture. Movement of the contour in Kim is analogous to movement of the image in the present invention. But the image is not a segment as that term is used in the art and in the present application. Not surprisingly, the reading of the claim of the present application on what is shown and described in Kim does not hold up.

Applicant has pointed out that Kim is not predicting the motion of the contour within any particular part of the image, so there are no boundaries or edges in Kim.

The examiner responds by referring to lines 54-67 of column 3 of Kim, but that passage describes a predicted contour meeting an extended contour boundary 10A. Applicant does not agree that this is a segment boundary, but in any event this interpretation of the claim has been precluded by the amendment to claim 1 to recite that the picture is divided into a plurality of segments independently of the image information within each segment. The contour and extended contour in Kim are clearly characteristics of the image information, so cannot be the segments referred to in claim 1.

Applicants have previously explained that Kim does not divide the picture into segments, and the examiner has responded by referring to lines 28-33 of column 3 as support for the

division of the macroblock into segments. First of all, the claim does not recite the division of a macroblock into segments, but the division of the picture into segments with each segment made up of macroblocks. The cited passage discusses shifting a contour through a search range of +/- 16 pixels. Since the contour itself is based on image information, it is not possible for the shifted contour to not also be based on image information. Thus, the shifted versions of the contour cannot define the segments referred to in claim 1 which must be defined independently of image information.

While the undersigned believes that the examiner is unreasonably stretching the claim language in trying to find macroblocks and segment boundaries in Kim, it is enough to note that there are no segments in Kim which are defined independently of image information. With this basic requirement of the claims not found in Kim, the entire rest of rest of the reading of the claim language on Kim fails.

The secondary references do not supply this teaching missing from Kim.

Respectfully submitted,

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